IN THE CLAIMS

1. **(Canceled)**

2. **(Original)** A thermoelectric device, comprising:

a P/N-type wafer having a plurality of P-type regions and a plurality of N-type regions generally interspersed between and adjacent the P-type regions;

a patterned metalization coupled with at least a subset of the P-type regions and N-type regions; and

first and second plates coupled with the P/N-type wafer.

3. **(Currently Amended)** The thermoelectric device of Claim 2, wherein the subset of the P-type regions and N-type regions ~~are~~ **is** arranged electrically in series and thermally in parallel.

4. **(New)** The thermoelectric device of Claim 2, wherein:

the plurality of P-type regions comprises a first number of regions;

the plurality of N-type regions comprises a second number of regions; and

the first number of regions is greater than the second number of regions.

5. **(New)** The thermoelectric device of Claim 2, wherein:

the plurality of P-type regions comprises a first number of regions;

the plurality of N-type regions comprises a second number of regions; and

the first number of regions is equal to the second number of regions.

6. **(New)** The thermoelectric device of Claim 2, wherein:

the plurality of P-type regions comprises a first number of regions;

the plurality of N-type regions comprises a second number of regions; and

the first number of regions is less than the second number of regions.

7. **(New)** The thermoelectric device of Claim 2, wherein each of the P-type regions comprise a first generally circular cross-section, and each of the N-type regions comprise a second generally circular cross-section.

8. **(New)** The thermoelectric device of Claim 2, wherein each of the P-type regions comprise a first generally rectangular cross-section, and each of the N-type regions comprise a second generally rectangular cross-section.

9. **(New)** The thermoelectric device of Claim 2, further comprising a passivating agent disposed upon a surface of at least one of the P-type regions and at least one of the N-type regions.

10. **(New)** The thermoelectric device of Claim 9, wherein the passivating agent comprises boron nitride.

11. **(New)** The thermoelectric device of Claim 2, wherein the P/N-type wafer and the patterned metallization cooperate to form at least a portion of a thermoelectric circuit that includes individual legs arranged electrically in series and thermally in parallel.